# Product Datasheet

## Apolipoprotein E R2/ApoE R2 Antibody - BSA Free
## NB100-2216

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**Publications: 8**

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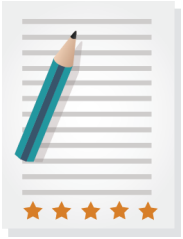
Updated 2/21/2025 v.20.1





# NB100-2216

Apolipoprotein E R2/ApoE R2 Antibody - BSA Free

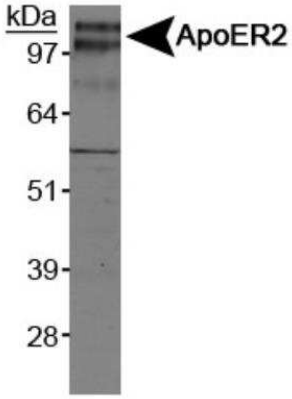
| Product Information | |
|---|---|
| **Unit Size** | 0.1 ml |
| **Concentration** | 1 mg/ml |
| **Storage** | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles. |
| **Clonality** | Polyclonal |
| **Preservative** | 0.05% Sodium Azide |
| **Isotype** | IgG |
| **Purity** | Immunogen affinity purified |
| **Buffer** | PBS |

| Product Description | |
|---|---|
| **Host** | Rabbit |
| **Gene ID** | 7804 |
| **Gene Symbol** | LRP8 |
| **Species** | Human, Mouse, Chicken |
| **Reactivity Notes** | Immunogen displays the following percentage of sequence identity for non-tested species: bovine (95%). |
| **Immunogen** | A synthetic peptide made to a C-terminal portion of the human ApoER2 protein sequence (between residues 863-963). [UniProt# Q14114] |

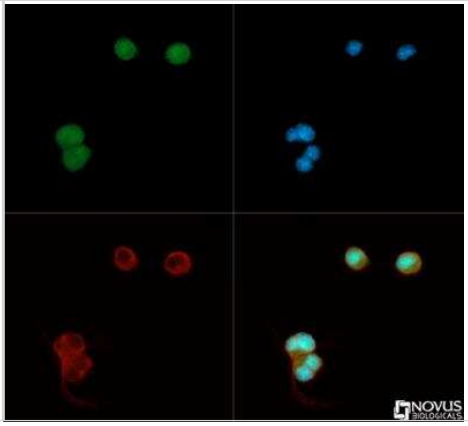
| Product Application Details | |
|---|---|
| **Applications** | Western Blot, Immunocytochemistry/ Immunofluorescence, SDS-Page |
| **Recommended Dilutions** | Western Blot 2 ug/ml, Immunocytochemistry/ Immunofluorescence 1:200-1:500, SDS-Page reported in scientific literature (PMID 27810638) |
| **Application Notes** | A band is seen at ~106 kDa representing the membrane form of ApoER2 in Western Blot. A larger ~130 kDa band may also be seen, representing the glycosylated form of ApoER2. |

## Images

Western Blot: Apolipoprotein E R2/ApoE R2 Antibody [NB100-2216] - Analysis of ApoER2 on mouse brain membrane.




Immunocytochemistry/Immunofluorescence: Apolipoprotein E R2/ApoE R2 Antibody [NB100-2216] - Antibody was tested in Neuro-2a cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).



## Publications

Tatsuaki Daimon, Atrayee Bhattacharya, Keyi Wang, Naoki Haratake, Ayako Nakashoji, Hiroki Ozawa, Yoshihiro Morimoto, Nami Yamashita, Takeo Kosaka, Mototsugu Oya, Donald W. Kufe MUC1-C is a target of salinomycin in inducing ferroptosis of cancer stem cells Cell Death Discovery 2024-01-05 [PMID: 38182558]

Heo J, Kang H Platelet-derived growth factor-stimulated pulmonary artery smooth muscle cells regulate pulmonary artery endothelial cell dysfunction through extracellular vesicle miR-409-5p Biological chemistry 2023-10-31 [PMID: 37903646]

Li Q, Morrill NK, Moerman-Herzog AM et al. Central repeat fragment of reelin leads to active reelin intracellular signaling and rescues cognitive deficits in a mouse model of reelin deficiency Cellular signalling 2023-06-12 [PMID: 37315752] (WB, Human)

Ding J, Bowes R C. Synaptic Expression of Apoer2 in the Plexiform Layers of Mouse Retina. J Comp Neurol 2000-07-25 [PMID: 10906706]

Fang Z, Zhong M, Zhou L et al. Low-density lipoprotein receptor-related protein 8 facilitates the proliferation and invasion of non-small cell lung cancer cells by regulating the Wnt/beta-catenin signaling pathway Bioengineered 2022-03-01 [PMID: 35246020] (WB, Human)

Arimitsu N, Taka, K, Fujiwara N, et al. Roles of Reelin/Disabled1 pathway on functional recovery of hemiplegic mice after neural cell transplantation; Reelin promotes migration toward motor cortex and maturation to motoneurons of neural grafts Exp. Neurol. 2019-06-08 [PMID: 31185198] (ICC/IF, Mouse)

Pillay S, Zou W, Cheng F et al. AAV serotypes have distinctive interactions with domains of the cellular receptor AAVR J. Virol. 2017-07-05 [PMID: 28679762] (WB, Human)

Wang W, Moerman-Herzog AM, Slaton A, Barger SW Presenilin 1 mutations influence processing and trafficking of the ApoE receptor apoER2. Neurobiol. Aging 2016-10-11 [PMID: 27810638] (WB, PAGE, Mouse)

## Procedures

**Western Blot Protocol for ApoER2 Antibody (NB100-2216)**
Apolipoprotein E R2/ApoE R2 Antibody:
Western Blot Protocol

1. Perform SDS-PAGE (4-12%) on samples to be analyzed, loading 35 ug of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. Rinse membrane with dH2O and then stain the blot using ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
4. Rinse the blot in TBS for approximately 5 minutes.
5. Block the membrane using 5% non-fat dry milk + 1% BSA in TBS for 2 hours at room temperature (RT).
6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
7. Dilute the rabbit anti-ApoER2 primary antibody (NB 100-2216) in blocking buffer and incubate overnight at 4C.
8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions (we used BioFX Super Plus ECL).

Note: Tween-20 can be added to the blocking or antibody diultion buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.

**Immunocytochemistry/Immunofluorescence Protocol for ApoER2 Antibody (NB100-2216)**
Apolipoprotein E R2/ApoE R2 Antibody:
Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

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## Products Related to NB100-2216

| | |
|---|---|
| HAF008 | Goat anti-Rabbit IgG Secondary Antibody [HRP] |
| NB7160 | Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP] |
| NBP2-24891 | Rabbit IgG Isotype Control |
| NB100-2216B | Apolipoprotein E R2/ApoE R2 Antibody [Biotin] |

**Limitations**
This product is for research use only and is not approved for use in humans or in clinical diagnosis.
Primary Antibodies are guaranteed for 1 year from date of receipt.

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